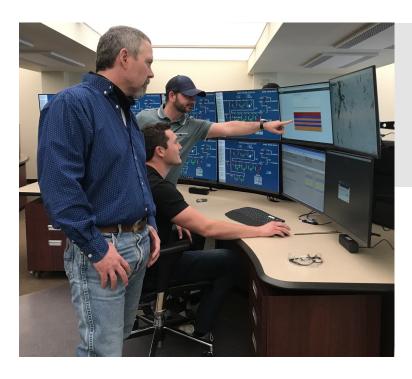


Pipeline leak detection systems can be complicated; difficult to implement and difficult to use. We are changing that.

Flowstate was built by pipeliners to tackle the challenge of implementing effective leak detection.

We are using modern technologies to solve the problems that have made advanced leak detection impractical. New technology means new possibilities for operators to improve monitoring and meet regulatory requirements.



We've seen from our field tests how it does an unbelievable job at catching leaks—and that has really built trust with our controllers.

Todd Biggs

Control Center Supervisor, Bridger Pipeline

Flowstate offers a solution that is:

Reliable: Minimizes false alarms

User Friendly: Intuitive and easy to learn

Flexible: One solution for your whole system

Quick to Deploy: Up and running in a couple months

Designed hand-in-hand with operators and controllers to meet their needs.

Features Built for Our Users:

- Easy setup and configuration
- Multiple diagnostic tools for alarm investigation
- Tools for reporting on alarms and change management
- Extensive user documentation & training
- Friendly, accessible customer support
- Next generation security— in the cloud or on-premise

PROVEN

Flowstate LDS has been commissioned on a variety of pipelines throughout the Rocky Mountain region. It has been field tested through more than 240 fluid withdrawal tests.

MEGA RULE READY

We've built our solution to not only adhere to API 1130's design standards, but also to help control rooms with its Operation and Maintenance requirements.

You have questions. We have answers.

How is the Flowstate LDS different than other solutions?

Our solution uses data science and machine learning technologies to tackle problems that have made computational leak detection a challenge, such as transient operations, meter offsets, and more. Machine learning has been shown to provide sensitivity needed to catch small leaks while minimizing false alarms.















Leak Detection Challenges

Flowstate Leak Detection Solution

Is it complicated to use?

No. You do not need to be a machine learning specialist or have a PhD in fluid flow to use the Flowstate LDS. Segments are easy to configure and the application has been built to be intuitive to use.

Is it a stand alone system or integrated with SCADA?

Flowstate LDS can operate as a standalone application, complete with tools for monitoring, analysis, reporting, and more. We can also provide our data as input to your SCADA or alarm management solution.

How is the data connected?

Our standard set up brings data into our database from your OPC server—often parallel to your SCADA system.

Are mobile alerts available?

Alerts (leak and data alarms) are available as text (SMS) alerts and by email. Daily and weekly reports are also available by email.

What is needed to get started?

Nominally, we need the following data:

- Flow rate at all inputs and outputs
- Density (or API gravity) for all multi-grade lines
- At least one line pressure (optional)
- Pump Status, Set Point, Control Valve % open (optional)
- >= 3 weeks of operational data*

^{*}depends on variability of the system

